

Programme

**3rd International Conference on
Energy Systems and Technologies**

ICEST 2015

**16-19 February 2015
Cairo, Egypt**

Programme of the

**3rd International Conference on
Energy Systems and Technologies**

ICEST 2015

**16-19 Feb. 2015
Cairo, Egypt**

**Organized by
Egyptian Energy Development Group (EEDG)**

Science Partners

**Egyptian Nuclear Physics Association (ENPA)
Science and Technology Forum (STF)**

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Prof. Dr. M.N.H. Comsan

Conference Coordinator
Dr. S.R. Atalla

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ICEST 2015

Conference Timetable

Time	Mon., 16 Feb.	Tue., 17 Feb.	Wed., 18 Feb.	Thu., 19 Feb.
9:00-10:30	Reg./OS	RET1	Full	IET2
10:30-11:00	Tea/Coffee	Tea/Coffee	Day	Tea/Coffee
11:00-13:00	KNR1	KNR2	Giza/Cairo	RET2
13:00-14:00	Break	Break	(Pyramids/	SMC2
14:00-15:30	ETD/IET1	EME/SMC1	Egypt.	Conf. Lunch
15:30-17:00	GBE/NET	Poster Session	Museum)	CS
19:00-22:00	Fatimide Cairo	Cruise on the Nile	Free Evening	

Programme abbreviations:

OS	Opening Session	IET	Innovations in Energy Technology
KNR	Keynote & Review Talk	NET	New & Emerging Technologies
EME	Energy Management & Economics	RET	Renewable Energy Technoloies
ETD	Energy Transmission & Distribution	SMC	System Modeling & Computation
GBE	Green Buildings & Environment	CS	Closing Session

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Conference Programme

Monday, 16 Feb. 2015

- 9:00 -10:30** **Registration / OS**
- 10:30 - 11:00** **Tea/Coffee**
- 11:00 - 13:00** **Session KNR1 [55/17/20]**
Chairperson: Prof. Dr. R. Eltahlawi
- 1 Solar energy and the drama of life on earth, from the Big Bang to Gaia: **Sobhy R. Atalla** [55]
 - 2 Tracking of solar panel by hydraulic system: **Shreekant Tare** [17]
 - 3 Towards a balanced energy mix for Egypt: **M.N.H. Comsan** [20]
- 13:00 – 14:00** **Break**
- 14:00 - 15:30** **Session ETD [9/10/24/42]**
Chairperson: Prof. Dr. T. Eltablawi
- 1 Load-flow control and voltage stability analysis of Egyptian distribution systems. A case study of a new city electrical network: Ayman Awad, **Ahmad Eid**, Mamdouh Abdel-Akher, and Salah Kamel [9]
 - 2 Energy transmission and distribution: **Sameh Mousa Mohamed Ali Noufal** [10]

- 3 An AC current limiting and interrupting device for power distribution systems: Saady Hasan, El-Sayed M. El-Refaie, Ali H. Kasem Alaboudy, and **Abdallah. M. Hamada** [24]
- 4 Enhancement of voltage profile for unbalanced distribution system with wind energy and superconducting magnetic energy storage: **Sayed M. Said**, and Ali Selim [42]

14:00 - 15:30

- Session IET1 [5/21/30/39/49]**
Chairperson: Prof. Dr. Essam Khalil
- 1 Novel carboxylated poly (glycidyl methacrylate) grafted cellophane for proton exchange membrane fuel cell applications: **M.A. Abu-Saied** [5]
 - 2 Assessment of the power quality of electric ferro alloys arc furnace: **Nagat Aly**, Mohamed Ebeed, and Adel Z El Dein [21]
 - 3 A direct laboratory approach to the study of electrolytic capacitor for energy conservation: **Muntari Abubakar** [30]
 - 4 LCL filter design with passive damping for photovoltaic grid connected systems: **KAHLANE Abd El Wahid Hamza**, LARBESS Cherif, and HASSAINE Linda [39]
 - 5 PdNi catalysts for energy conversion in direct ethanol fuel cells (DEFCs): **A.M. Sheikh**, M. Soude, A. Atif, and C.F. Malfatti [49]

15:30 - 17:00

Session GBE [44/46/51]

Chairperson: Prof. Dr. M.S. Abdel-Azim

- 1 Energy efficient designs and training of sustainable buildings in urban environment: Essam E. Khalil, and **Doaa El-Sherif** [44]
- 2 Analyses of thermal comfort and indoor air quality under stratum, displacement and mixing ventilation systems: **Ahmed F. Elharoun**, Ahmed A. Fahim, Esmail M. Bialy, and Essam E. Khalil [46]
- 3 Implication of thermal energy distribution towards human comfort in a space. A field analysis: **Ahmad Rasdan Ismail**, Norfadzilah Jusoh, Rosli Abu Bakar, Nor Kamilah Makhtar, and Suriatini Ismail [51]

15:30 - 17:00

Session NET [18/22/36]

Chairperson: Dr. A.A. Khozam

- 1 Advances in hydrogen energy technologies: **Ammar M. Omar**, and Mohamed S. Saad [18]
- 2 Public perceptions towards new and emerging energy technologies: A cross-country perspective from students and teachers concerning bioenergy: **Pradipta Halder** [22]
- 3 Effect of rock porosity in geothermal electricity potential estimation of reservoir Z": **Latifah Nurul Qomariyatuzzamzami**, and Alamta Singarimbun [36]

19:00 - 22:00

Fatimide Cairo

Tuesday, 17 Feb. 2015

9:00 - 10:30

Session RET1 [2/7/19/23/28/63]

Chairperson: Prof. Dr. Shreekant Tare

- 1 Assessment of solar energy potential in western region locations of Saudi Arabia using the analytic hierarchy process (AHP): **Said Ali ElQuliti**, Hisham Alidrisi, and Ahmed Al-Garni [2]
- 2 Double exposure PV-T solar cooker. Modelling and simulation: **Faouzi Nasri**, Chaouki Ali, Rachid Nciri, Kamel Rabhi, and Slimen Attyaoui [7]
- 3 Application of superconducting magnetic energy storage (SMES) to improve the frequency fluctuations of power systems connected with wind energy resources: **Hossam S.H. Salama**, and Mohamed M. Aly [19]
- 4 Design and implement of 100 kW rooftop grid connected PV system. Faculty of Engineering at El-Minya as a case study: **M.S. Hassan**, and Adel A. Elbaset [23]
- 5 Evaluation of voltage flicker emissions of variable speed DFIG-based wind turbines: **Walid S.E. Abdellatif**, Ali H. Kasem Alaboudy, and Ahmed M. Azmy [28]
- 6 Optimal operation of stand-alone PV pumping system based on an induction motor: Adel A. Elbaset, Ali H. Kasem Alaboudy, and **Saad A. Mohamed Abdelwahab** [63]

10:30 - 11:00 **Tea/Coffee**

11:00 - 13:00 **Session KNR2 [45/69/14]**

Chairperson: Prof. Dr. M.N.H. Comsan

- 1 Holistic approach to energy performance of built environment. Decades of activities: **Essam E. Khalil**, and Dick van Dijk [45]
- 2 Energy efficiency opportunities in WT and WWT plants in Egypt: **A.A. Khozam** [69]
- 3 Role of energy in sustainable urban development planning: **Sandip S. Deshmukh** [14]

13:00 - 14:00 **Break**

14:00 - 15:30 **Session EME [3/6/16/32/35/48]**

Chairperson: Prof. Dr. Shreekant Tare

- 1 Tracking the history and performance of the energy conservation methods used in Credit Agricole head quarter project, Egypt (Case Study): **Mohamed Maher Hassan**, and Radwa Maher Amin [3]
- 2 Energy reform for West Africa in climate change crisis era: **Cecily Nwokocho**, Raymond Kasei, and Urias Goll [6]
- 3 Applying lean six sigma DMAIC methodology to identify the significant factors causing delay in construction projects in the electricity sector -Libya: **Ali Elebarkous** [16]
- 4 Energy management with capacitor placement for economics low carbon emissions using modified multi-objective

Grey Wolf optimizer: **Al-Attar A. Mohamed**, Ahmed A.M. El-Gaafary, Yahia S. Mohamed, and Ashraf M. Hemeida [32]

- 5 Improvement of green human capital, green absorptive capacity and green dynamic capacities to achieve green service innovation: An analysis of structural equation modeling (SEM): **Yu-Shan Chen**, and Yu-Hsien Lin [35]
- 6 A proposed model for examining and analyzing environmental costs and their impact on financial statements. A field study with application on petroleum sector in Kuwait: **Adel Dashti** [48]

14:00 - 15:30 **Session SMC1 [8/13/29/31/50/68]**

Chairperson: Prof. Dr. M.N.H. Comsan

- 1 Deduction of two-diode model parameter for photovoltaic system: **Adel A. Elbaset**, Hamdi Ali, and Montaser Abd-El Sattar [8]
- 2 Fault current coefficients determination of unsymmetrical fault for microgrid adaptive protection system: **Ali Bakr**, and Rashad M. Kamel [13]
- 3 Fuzzy logic control of modern aircraft actuators: **Reyad Abdel-Fadil**, Ahmad Eid and Mazen Abdel-Salam [29]
- 4 InxGa1-xN-based multi-junction solar cell modeling and performance analysis using Matlab/Simulink: Tajrin Akter, Md Zubair Ebne Rafique, Md. Soyaeb Hasan, **Md. Rafiqul Islam**, Ibrahim Mustafa Mehedi, and Abdulaziz Alshareef [31]

- 5 Self-tuning DC motor design based on radial basis function neural network: **Asmaa Fawzy Rashwan** [50]
- 6 Modeling and optimization of fuel rich and fuel lean catalytic combustion of stabilized confined turbulent gaseous diffusion flames over noble disc burners: Tahani S. Gendy, **Taher M. ElShiekh**, Amal S. Zakhary, Salwa A. Ghoneim, and Ahmed K. Aboul-Gheit [68]

15:30 - 17:00

Poster Session

Chairperson: Dr. S.R. Atalla

[4/11/25/27/40/43/54/57/64/67]

- 1 Risk-based maintenance scheduling for power distribution systems: **Meysam Abbasi Sararoudi**, and Alireza Hatami Sharifabadi [4]
- 2 The technology of fiber optic sensors: **G. Slimani** [11]
- 3 Reduce the risk of radon gas in contaminated soil and calculation of the lowest possible cost damage: **Abbas Ali Mahmood Karwi**, and Eman Mohammed Abdullah [25]
- 4 Direct conversion of carbonaceous feedstocks to electricity in a solid oxide fuel cell: **Abdullah Al-Musa** [27]
- 5 Benefits and costs sharing through RES electricity cooperation between Europe and third countries: **Charikleia Karakosta**, Vangelis Marinakis, Aikaterini Papapostolou, and John Psarras [40]

- 6 Examining of replacement ACCC conductors rather than ASCR conductors in 20 kV overhead networks: **Shahram Moradi**, and Ahmad Asghari [43]
- 7 Wind penetration in electricity network voltage stability based on SVC devices: Ashraf M. Hemeida, and **Ayat A. Saleh** [54]
- 8 Study of the effect of porous medium (sand) thickness on double slope solar still productivity with considering humid air region: **Sherif Adham Mohamed** [57]
- 9 Preparation, stability and photocatalytic activity of Titania nanofluid using gamma irradiated Titania nanoparticles by two-steps method: **Radwa A. Elsalamony**, Rania E. Morsi, and Ahmed M. Alsabagh [64]
- 0 Estimation of economic thickness of thermal insulation for process piping and equipment: **T.M. Elshiekh**, and H.A. Elmawgoud [67]

19:00 - 22:00

Cruise on the Nile*

Wednesday, 18 Feb. 2015

9:30 - 22:00

**Social and Culture Events - Full Day
Giza/Cairo***

(*) At extra charge. For more information contact Conference Treasurer

Thursday, 19 Feb. 2015

9:00 - 10:30

Session IET2 [37/38/47/60/61/66]

Chairperson: Prof. Dr. E. El-Hakim

- 1 Energy from waste case study (Co generation plants - West of El- Zawya power station-Libya): **Ali Fadiel Ali**, and Farag Hamdi [37]
- 2 Experimental study of energy separation in counter flow vortex tube: **Mahmoud S. Ahmed** [38]
- 3 Enhancement of power system transient stability using resistive superconducting fault current limiter with YBCO and Bi-2212: **Emad A. Mohamed**, and Mohamed M. Aly [47]
- 4 Improvement of power quality using multiple types of FACTS devices: Mai Moddather, **Abdel-Moamen M. A.**, and Gaber Shabib [60]
- 5 Biodiesel production as clean energy source from waste cooking oils: Characterization using TGA, FTIR and fuel properties: **A.M. El-Noby**, Gaber El-Saady, Youssef Mobarak, Abdel-Moamen M. A, Mohamed A.A. Wahab, and Mohamed M. Hamada [61]
- 6 Optimum injection dose rate of hydrogen sulfide scavenger to treatment petroleum crude oil: **T.M. Elshkeikh**, H.A. Elmawgoud, S.A. Khalil, and A.M. Alsabagh [66]

10:30 - 11:00

Tea/Coffee

11:00 - 12:30

Session RET2 [34/53/56/58/59]

Chairperson: Prof. Dr. M.E. Abdelazim

- 1 Scalable solar tower for rural areas: Experimental study and CFD analysis comparison: **Basil Abdel-Megied**, and Mohamed El-Anwar [34]
- 2 Renewable energy in Egypt: **Dina Taman** [53]
- 3 Experimental and CFD of designed small wind turbine: **Walid Mohammed** [56]
- 4 Solar powered switching DC power supply: **Mohamed Ahmed Azab** [58]
- 5 Theoretical study of the effect of the angle of incidence on the optical performances of two integrated solar collectors: **Olfa Helal**, and Bechir Chaouachi [59]

12:30 - 14:00

Session SMC2 [1/33/41/52/62/65]

Chairperson: Prof. Dr. H. Motaafy

- 1 Reference point based neural network algorithm applied to fuzzy multiobjective environmental/economic dispatch problems: A.A. Mousa, B. N. Al-Matrafi Bart, and **M.A. El Shorbagy** [1]
- 2 Environmental/economic dispatch using multi-objective states of matter optimization algorithm: **Al-Attar A. Mohamed**, Ahmed A.M. El-Gaafary, Yahia S. Mohamed, and Ashraf M. Hemeida [33]

برنامج

المؤتمر الدولي الثالث لتنظيم وتكنولوجيا الطاقة

ICEST 2015

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المجموعة المصرية لتنمية الطاقة

الشراكة العلمية

الجمعية المصرية للفيزياء النووية
جمعية منتدى العلم والتكنولوجيا

16-19 فبراير 2015
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